

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: 168p251

Luminaire Tested: **44DP-2T8-ST4D-1EB-SI-S22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 168p251
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 44DP-2T8-ST4D-1EB-SI-S22
Description: NEORAY GEO DIRECT PENDANT MOUNT LUMINAIRE, 2 32T8, WITH
ACRYLIC DIFFUSER
Light Source: TWO - F032/735 - 2850 LUMENS - 32 WATTS
Ballast/Driver: B232IUNVHP-B

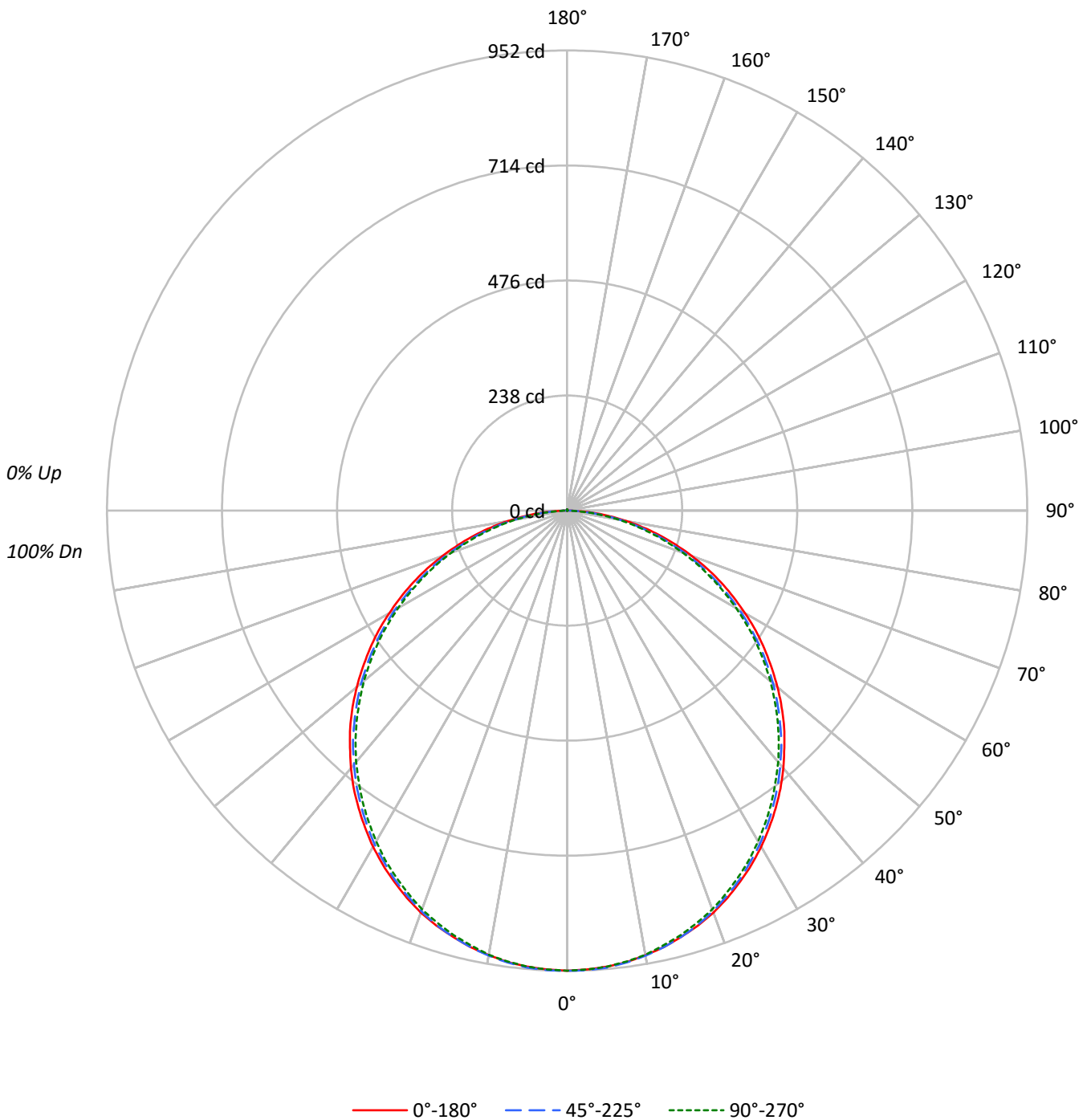
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 2706.3 lumens
Efficiency: 47.5%
Efficacy: 49.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.36
Luminous Opening: Rectangular (W 0.65' x L: 3.94' x H: 0')
CIE Type: Direct

Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	57	57	57	57	55	55	55	55	53	53	53		50	50	50		48	48	48	47
1	52	49	47	45	50	48	46	45	46	45	43		44	43	42		43	42	41	40
2	47	43	40	37	46	42	39	36	40	38	35		39	37	35		37	35	34	33
3	43	38	34	31	41	37	33	30	35	32	30		34	31	29		33	31	29	28
4	39	33	29	26	38	33	29	26	31	28	25		30	27	25		29	27	25	24
5	36	30	25	22	35	29	25	22	28	25	22		27	24	22		26	24	21	20
6	33	27	22	19	32	26	22	19	25	22	19		25	21	19		24	21	19	18
7	31	24	20	17	30	24	20	17	23	20	17		22	19	17		22	19	17	16
8	29	22	18	15	28	22	18	15	21	18	15		21	17	15		20	17	15	14
9	27	20	16	14	26	20	16	14	19	16	14		19	16	14		18	16	13	13
10	25	19	15	12	24	18	15	12	18	15	12		18	14	12		17	14	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4030	4030	4030
5°	4024	4032	4024
10°	4014	4019	4010
15°	4001	4001	3983
20°	3986	3973	3955
25°	3956	3937	3909
30°	3925	3895	3861
35°	3886	3844	3808
40°	3846	3791	3752
45°	3801	3729	3687
50°	3740	3661	3615
55°	3675	3579	3527
60°	3598	3488	3420
65°	3516	3365	3295
70°	3391	3230	3143
75°	3255	3042	2927
80°	3047	2754	2633
85°	2671	2234	1943



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	90.1	3.3	1.6
10°-20°	257.5	9.5	4.5
20°-30°	388.5	14.4	6.8
30°-40°	465.8	17.2	8.2
40°-50°	481.3	17.8	8.4
50°-60°	434.5	16.1	7.6
60°-70°	334.2	12.3	5.9
70°-80°	197.7	7.3	3.5
80°-90°	54.6	2.0	1.0
90°-100°	0.1	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.5	0.0	0.0
140°-150°	0.5	0.0	0.0
150°-160°	0.5	0.0	0.0
160°-170°	0.3	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-30°	736.0	27.2	12.9
0°-40°	1201.8	44.4	21.1
0°-60°	2117.6	78.2	37.2
0°-90°	2704.2	99.9	47.4
90°-120°	0.1	0.0	0.0
90°-150°	1.2	0.0	0.0
90°-180°	2.0	0.1	0.0
0°-180°	2706.3	100.0	47.5

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	947	948	949	950	947	90
15°	913	913	913	913	909	258
25°	847	846	843	841	837	390
35°	752	749	744	741	737	471
45°	635	629	623	619	616	489
55°	498	493	485	480	478	445
65°	351	344	336	331	329	347
75°	199	192	186	182	179	210
85°	55	50	46	42	40	59
90°	1	1	1	1	1	3
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	1	1	1	1	1	1
145°	1	1	1	1	1	0
155°	1	1	1	1	1	0
165°	2	1	1	1	1	0
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	952	952	952	952	952
2.5°	950	951	952	953	950
5°	947	948	949	950	947
7.5°	942	942	943	944	941
10°	934	935	935	936	933
12.5°	925	925	925	925	921
15°	913	913	913	913	909
17.5°	900	899	899	898	894
20°	885	884	882	881	878
22.5°	867	866	863	862	858
25°	847	846	843	841	837
27.5°	826	824	820	819	815
30°	803	801	797	794	790
32.5°	778	776	771	768	764
35°	752	749	744	741	737
37.5°	725	721	716	712	708
40°	696	692	686	682	679
42.5°	665	661	656	651	648
45°	635	629	623	619	616
47.5°	602	596	590	585	582
50°	568	563	556	551	549
52.5°	533	527	521	515	513
55°	498	493	485	480	478
57.5°	463	456	449	443	441
60°	425	419	412	405	404
62.5°	388	382	374	368	366
65°	351	344	336	331	329
67.5°	313	306	299	293	292
70°	274	268	261	256	254
72.5°	236	230	222	218	216
75°	199	192	186	182	179
77.5°	161	155	149	145	143
80°	125	119	113	109	108
82.5°	89	84	79	75	73
85°	55	50	46	42	40
87.5°	22	20	16	14	13
90°	1	1	1	1	1
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	1	0	1	0	0
132.5°	0	0	0	0	0
135°	1	1	1	1	1
137.5°	1	0	1	1	1
140°	1	1	1	1	1
142.5°	0	0	1	1	0
145°	1	1	1	1	1
147.5°	1	1	1	1	1
150°	1	1	1	1	1
152.5°	1	1	1	1	1
155°	1	1	1	1	1
157.5°	1	1	1	1	1
160°	1	1	1	1	1
162.5°	2	1	1	1	1
165°	2	1	1	1	1
167.5°	1	1	1	1	1
170°	1	1	2	1	1
172.5°	2	2	2	2	2
175°	2	2	2	2	2
177.5°	2	2	2	2	2
180°	2	2	2	2	2

(END OF REPORT)